# The genus *Daspletis* Loew, 1858 and the description of two new genera, *Anasillomos* and *Remotomyia* (Diptera: Asilidae: Stenopogoninae)

by

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The southern African genus Daspletis Loew, 1858, is revised and a key presented for the separation of six species – D. vulpes, D. hirtus, D. hermanni (formerly Microstylum), D. setithoracicus (formerly Neodysmachus) and two new species, D. placodes (from northern Transvaal) and D. stenoura (from northern Cape Province). Two new southern African genera are described: Remotomyia, with four species (R. albosetatus (formerly Daspletis) and three new ones R. brunales, R. longipalpus and R. penrithae) and Anasillomos with a single new species (A. chrysopos). A key to these and other related genera of the tribe Stenopogonini is presented.

## INTRODUCTION

Papavero (1973) has produced an excellent preliminary classification of the subfamilies within the family Asilidae. His arrangement does not agree entirely with that used by Hull (1962) and Oldroyd (1974, 1980) but is in my opinion a very convincing one which I propose to adopt. Papavero's (1973) subfamily Stenopogoninae is basically a combination of Oldroyd's (1980) Dasypogonini and Stichopogonini (which together with Xenomyzini formed Oldroyd's Dasypogoninae). Papavero decided that Oldroyd's Xenomyzini was distinct enough to stand as a full sub-family (Trigonomiminae). Papavero's Stenopogoninae is essentially a combination of Hull's tribes Stenopogonini and Stichopogonini and, while he has not yet divided this subfamily into tribes, I suspect that he would use the same names and divide it in the same way as Hull did. The Afrotropical Stenopogonini, sensu Hull (1962), excluding Oligopogon and Psilinus and including Dogonia, Empodiodes and the new genera described in this paper should, I suggest, all be placed in the tribe Stenopogonini. Hull's key to the genera of Stenopogonini is useful. It clearly shows how the genera can be split into two groups on the basis of the presence or absence of setae on the anatergite (metanotal colosities). This paper deals with genera which possess these setae. It is hoped that those which do not, will be treated in a future publication.

Nomenclature is based on McAlpine (1981). Wings were measured from tip to humeral crossvein (length) and through first fork of radial sector (width). The relative widths of an eye and the face have been expressed as an "eye:face width ratio", both eye width and face width were measured at the widest point across the head in anterior view. Genitalia were removed from specimens, macerated in hot KOH and drawn with the aid of a drawing-tube. Specimens studied are in the following museums: British Museum (Natural History), London – BMNH; Natal Museum, Pietermaritzburg – NM; State Museum, Windhoek – SMW.

#### Key to stenopogonine genera possessing hairy anatergites

3· -	First flagellomere with distinct well-developed microsegment
5.	Facial swelling well-defined in dorsal part; eye: face width ratio greater than 1, 30:1  Oratostylum Ricardo
	Facial swelling not well-defined in dorsal part; eye: face width ratio less than 1, 30:1
6.	Remotomyia gen. nov. Facial swelling occupying about three-quarters of space between antennal bases and lower facial margin, and entirely covered with strong bristles and setae; dorsocentral bristles well developed anterior of transverse suture; vein M <sub>1</sub> not strongly arched anteriorly; postmetacoxal membrane always covered with long setae

## Anasillomos gen. nov.

Derivation: Gr. anasillos = bristling hair; omos = shoulder. Refers to the strong bristles found on the lateral extremities of the pronotum and on the propleuron. Type species: Anasillomos chrysopos spec. nov. by present designation. Presently monotypic.

Diagnosis: Stenopogonine flies with the following combination of characters: Antenna with well-developed microsegment; first flagellomere longer than scape and pedicel combined; propleuron and lateral lobes of pronotum equipped with strong well-developed bristles (Fig. 2): palps at least half as long as proboscis; facial swelling not markedly projecting in dorsal part (Fig. 2); Cell  $m_3$  narrowly open on wing margin; dorsocentral bristles poorly developed anterior of transverse suture.

# Anasillomos chrysopos spec. nov. Figs 1-5

Derivation: Gr. chrysos = gold; opos = face. Refers to the gold pruinose face of this species.

Description: Based primarily on holotype  $\delta$  but supplemented with information from paratypes.

Head (Fig. 2): Antenna (Fig. 1) dark brown; first flagellomere longer than scape and pedicel combined, with a well-developed micro-segment about as long as pedicel; scape and pedicel with yellowish bristles and setae. Face dark brown; strongly gold pruinose, profile as in Fig. 2; eye: face width ratio 1,23:1. Mystax composed of yellow and white bristles and short white setae; bristles shorter than antennae and occupying lower three-quarters of face. Vertex dark red-brown, strongly gold pruinose, with shortish, strong, yellow-brown bristles laterally. Ocellarium moderately prominent bearing about 8 yellow-brown bristles. Occiput dark red-brown, strongly silver pruinose, bearing short, yellow-brown bristles and short, white setae. Proboscis dark red-brown with fine white setae ventrally. Palp slender dark red-brown with fine yellow and white setae; about half as long as proboscis.

Thorax: Pleura orange-brown, silver-gold pruinose, brown-yellow bristles and fine white setae. Katatergite with ca. 8 brown-yellow bristles and a few, white setae. Antepronotum covered with longish brown-yellow bristles (Fig. 2) some of which also occur on propleuron. Anatergite with a good number of fine, short, white setae laterally. Mesonotum dark red-brown, post-pronotal lobes more orange-brown; silver pruinose longitudinal stripes and velvet black areas, gold pruinose on post-pronotal lobes. Post-pronotal lobes with ca. 10 well-developed brown-yellow bristles; 8 notopleural bristles; 4 supra-alars, 4 postalars, all brown-yellow. Dorsocentrals brownish, moderately developed, do not go anterior of mid length of mesonotum. Posterior part of mesonotum with a few scattered, fine, white setae. Scutellum with 6 brown-yellow marginal bristles; disc with a few, fine, white setae. Halters yellowish. Legs: reddish-brown except for ventral parts of femora which are orange-brown; bristles white, tipped with yellow (those on femora shorter and yellower), setae short white. Claws orange-brown with blackish tips. Wings: Holotype 9,2 × 3,1 mm. Membrane transparent, colourless; venation dark brown, orange anteriorly. Cell r<sub>5</sub> closed and long stalked, m<sub>3</sub> narrowly open or just closed on wing margin, cup closed on wing margin.

Abdomen: Dark brown, yellow-brown antecostae; terga strongly silver pruinose, with yellow and white bristles laterally and small white setae dorsally.  $\delta$  genitalia as in Figs 3-5.

Variation: Defective specimen from Namib Desert Park not as bristly and with more orange coloration, especially the legs and abdomen.

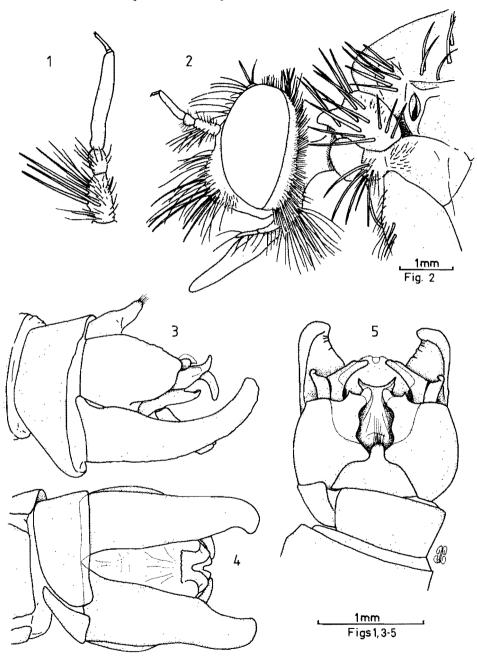
MATERIAL EXAMINED. BOTSWANA: 3 & (holotype and paratypes), Serowe, 29.viii.1982, Forchhammer (NM). NAMIBIA: 2 & (paratypes), Riverside 135, Bethanie, SE 2616, 23–26.x.1971, H 4827 (SMW & NM); 1? (paratype), Namib Desert Park, Kuiseb R. nr Gobabeb, on dry river bed, 7.x.1976, A. B. Cunningham (NM); 1 & (paratype), Sesriem 137, Maltahöhe, SE 2415 Db, 15–17.ii.1973, H 11662 (SMW). NM Type number 2653. H 4827 is a SMW accession number – the collectors were Coetzee, Penrith and Olivier.

Remarks: Appears to be active in mid-summer (Table 1)

#### Daspletis Loew

Daspletis Loew, 1858: 337. Type species D. vulpes Loew, 1858: 337, by monotypy.

Neodysmachus Ricardo, 1925: 263. Type species N. setithoracicus Ricardo, 1925: 264, by original designation. Syn. nov.



Figs 1-5. Anasillomos chrysopos spec. nov. paratype male. 1. Antenna, lateral aspect. 2. Head and part of thorax. 3-5. Genitalia. 3. Lateral. 4. Ventral. 5. Dorsal.

Ricardo (1925) erected the genus *Neodysmachus* for one Cape species of *Daspletis*-like flies which possess an open  $r_5$  cell. This is insufficient grounds on which to base a genus. Venation can be highly variable and the open or closed condition of wing cells may not be an entirely reliable feature. In *D. hermanni*, for example,  $r_5$  may be open, closed on the wing margin, or closed and with a stalk-vein joining the cell to the wing margin. I consider *Neodysmachus* a synonym of *Daspletis*.

The separation of Daspletis and Microstylum is in some ways far more problematic as these genera share so many features. Both Hull (1962) and Oldroyd (1974) use the character 'first posterior cell open' to characterize Microstylum in their keys. My preliminary observations on this genus indicate that the closed condition also exists, especially in species of the M. acutirostrae group. The genus Eclipsis Bezzi was listed as a valid genus by Oldroyd (1980) in the Afrotropical Catalogue even though Papavero (1973) had placed it as a 'subgenus' of Microstylum. The only described species of Eclipsis, E. maculiventris Bezzi, possesses a closed r<sub>5</sub> cell and is quite clearly related to M. acutirostrae and related species (some of which remain undescribed). It is obvious that this characteristic is unreliable. The strongly arched M<sub>I</sub> vein frequently used to characterize Microstylum is also unsatisfactory as there are some instances where it is difficult to decide if the vein is 'strongly' arched or not. For the present I am relying on three other features, which appear to be common to all described species of Afrotropical Microstylum, to separate this genus from Daspletis. The facial protuberance of Daspletis occupies at least three-quarters of the face while in Microstylum this swelling is confined to the lower half of the face and often only to a small area just above the lower facial margin. Daspletis species are more bristly; the dorsocentrals extend from the posterior to the anterior margins of the mesonotom, whereas in Microstylum they are well developed only posterior of the transverse suture (there may be one or two small ones anterior of the suture but they are never found near the anterior margin of the mesonotum); the

TABLE 1. Seasonal incidence of species in the stenopogonine genera covered in this paper.

SPECIES	MONTHS											
	J	F	M	A	M	J	J	A	s	О	N	D
Anasillomos chrysopos	_	•						•		•		
Daspletis hermanni									•	•		
D. hirtus		•	•								•	
D. placodes		•		•								•
D. setithoracicus	•				•					•	•	•
D. stenoura			•									
D. vulpes			•		•							
Dioctobroma flavoterminatum				•								
Dogonia nigra			•									
D. saegeri			•									
Oratostylum lepidum		•						•	•	•		
Remotomyia albosetatus			•					•				
R. brunales									•			
R. longipalpus									•			
R. penrithae								•	•	•		

postmetacoxal membrane is covered with long setae in all Daspletis while this membrane is bare in most Microstylum. The reliability of these features is not known with any certainty at present but I intend revising Microstylum at a future date and this matter will be attended to then.

Daspletis appears to be active in late summer (Table 1); the exceptions being hermanni (which is active in spring) and setithoracicus (active from October-May).

#### Key to species of Daspletis

<ol> <li>Occiput with long, sinuous bristles dorsally (behind occllarium)</li> <li>Occiput with short, straight bristles only</li> <li>Mesonotum with a cluster of strong, yellow-white setae posteriorly between dorsocentral bristles, first flagellomere of antenna about as long as scape with pedicel combined; pulvil-</li> </ol>
lae half as long as claws; & wing membrane colourless; & genitalia as in Figs 19-21
setithoracicus
— Mesonotum with a few weak setae posteriorly; first flagellomere of antenna clearly longer than scape and pedicel combined; pulvillae almost as long as claws; $\delta$ wing membrane brown stained; $\delta$ genitalia as in Figs 8–10
3. Long setae of legs and abdomen orange to reddish; & genitalia as in Figs 25-27 vulpes
— Setae of legs and abdomen yellow-white 4
4. Fused gonocoxites of & broad for most of length (viewed from top of specimen - Figs
15 & 18)
— Fused gonocoxites of ♂ broad at base, becoming constricted at about mid-length before
widening, only slightly, before tipstenoura
5. Gonocoxites with lateral flanges distally (Fig. 16) placodes
— Gonocoxites without flanges (Fig. 13) hirtus

## Daspletis hermanni (Ricardo, 1925) comb. nov. Figs 6-10

Microstylum hermanni Ricardo, 1925; 249

Daspletis salicior Oldroyd, 1974: 37. Syn. nov.

Redescription: Based on syntypes of hermanni, types of salicior and other material as listed below.

Head: Antenna (Fig. 6): scape and pedicel dark brown with white bristles and setae; first flagellomere yellow-brown, quite slender. Face yellow-brown, fine gold pruinose, profile as in Fig. 7. Mystax limited to facial protuberance, compoed of long yellow-white bristles and short white setae. Vertex dark red-brown, gold pruinose, equipped with yellow bristles and setae. Ocellarium similar to hirtus. Occiput dark red-brown, silver pruinose, equipped with white bristles and setae; dorso-central part with shortish bristles only (ie. no long sinuous bristles as in hirtus etc.) Proboscis dark red-brown, reddish ventrally and with a number of long white setae. Palp dark brown with yellow-white setae.

Thorax: Pleura dark red-brown, gold pruinose, with pale yellow-white bristles and white setae. Katatergite with about 12 long whitish bristles and a few white setae. Anterpronotum with whitish bristles and setae. Anatergite with a cluster of fine white setae laterally. Mesonotum dark brown, gold pruinose. Postpronotal lobes brown-orange with ca. 10 shortish pale yellow-white bristles and setae; ca. 9 yellow-white noto-pleural bristles (4 anteriorly, 5 posteriorly), ca. 4 supra-alars, ca. 3-4 postalars, all pale yellow-white. Dorsocentral bristles pale yellow-white, extending to anterior of mesonotum. Posterior part of mesonotum with a few fine white setae medially between dor-

socentrals. Scutellum with 6 long yellow-white bristles marginally; disc with a few fine small white setae. Halters yellow-brown. Legs: Brown-orange, following parts dark redbrown – coxae, outer dorsal parts of fore and mid femur, ventral half of hind femur. Bristles and setae whitish, not particularly abundant or well developed. Claws dark brown with proximal halves orange. Wings: 12,5–16,0 mm long; 3,7–5,2 mm wide. Membrane almost colourless in  $\mathcal{P}$ , brown stained in  $\mathcal{F}$  (particularly along veins). Venation dark brown. Cell  $r_5$  may be closed with a short stalk, closed on wing margin or narrowly open ( $\mathcal{F}$  specimens tend towards open condition while  $\mathcal{P}$  specimens tend towards closed condition). Cell  $m_3$  always closed and stalked, cup narrowly open or closed on wing margin.

Abdomen: Terga and sterna dark brown, antecostae may be brown-yellow. Marginal bristles (yellow) present only on tg 1 other terga and sterna with fine shortish white setae only (longer anteroventrally).  $\mathcal{P}$  with setae on segments 4–7 anteriorly directed.  $\mathcal{S}$  genitalia as in Figs 8–10.

Variation: Sexual dimorphism limited almost entirely to wing coloration.

MATERIAL EXAMINED. SOUTH AFRICA: Cape Province: 1 & 1 \, 2 \, (Lectotype & and paralectotype), Willowmore, 25.x.1916, Dr Brauns (BMNH); 2 & 6 \, 2 \, (including & holotype, 2 \, 2 \, paratypes of D. salicior), Willowmore, 20.x.1921, Dr Brauns (NM); 1 &, Hopetown, Nelspoort, 19.ix.1940, G. van Son (NM).

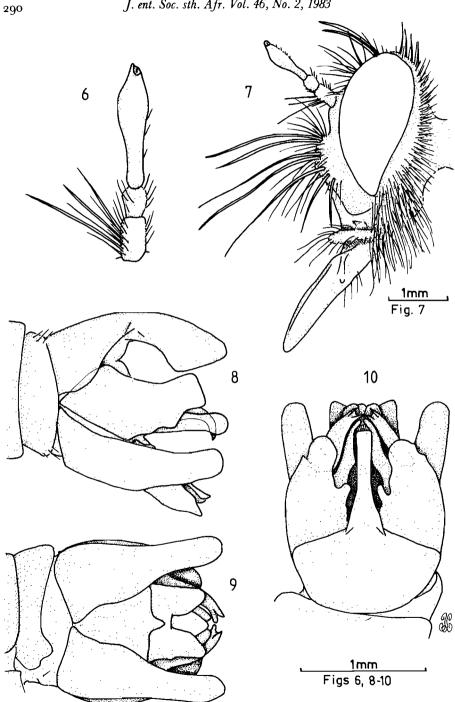
Previously recorded material: Ricardo (1925) did not designate a holotype but merely dealt with her specimens as syntypes. I hereby designate one of the males in the BMNH as lectotype and the other  $\eth$  and  $\Im$  paralectotypes. Ricardo also records 2  $\Im$ , from Kimberley and from Cape Colony. These specimens are not in the BMNH but probably in the South African Museum (Cape Town). Oldroyd's (1974) types of salicior included a  $\Im$  from Twee Rivieren which definitely belongs to D. hirtus.

Remarks: Preliminary work on the genus Microstylum, undertaken at the BMNH, revealed that M. hermanni Ricardo was the only described species of Microstylum to possess a facial protuberance occupying more than half the distance between antennal bases and lower facial margin, and dorsocentral bristles anterior of the transverse suture. It has subsequently been noted that the postmetacoxal membrane in hermanni is covered with long setae like other Daspletis species and unlike most species of Microstylum. These features were possessed by all described Daspletis species and so, at least until more detailed work has been done on Microstylum, I suggest hermanni should be considered a valid species of Daspletis even though it is the only species displaying sexual dimorphism in wing coloration (a situation not uncommon in Microstylum).

Oldroyd's specimens of *D. salicior* from Willowmore are identical to others he identified as *M. hermanni*, a situation difficult to understand. His drawing of the male holotype genitalia of *salicior* (see his Fig. 25) shows the fused gonocoxites as rather short and with a sharply pointed subapical process. A re-examination of the specimen shows that Oldroyd had not dissected it and that the fused gonocoxites were broken at the time the drawing was made.

Despite the intensive collecting done by Brauns this species was collected only in September and October (Table 1).

Daspletis hirtus Ricardo, 1925. Figs 11-15
Daspletis hirtus Ricardo, 1925: 263.



Redescription: Based on all material examined including types (the  $\delta$  of which is now defective in that the terminal segments of the abdomen are missing).

Head (Fig. 11): Antenna (Fig. 12) orange-brown, scape dark red-brown; scape and pedicel with white bristles and setae; first flagellomere with small apical pit enclosing a tiny spine. Face blackish, entirely silver pruinose; lower three-quarters quite strongly protruding. Mystax confined to facial protuberance, composed of long white bristles (longer than antennae) and white setae. Vertex blackish, entirely silver pruinose, equipped with white bristles and setae. Ocellarium moderately prominent; ocelli shiny yellowish; ocellar setae well-developed. Occiput blackish, silver pruinose, equipped with white bristles and setae; about 6 long, sinuous, white bristles dorsocentrally (behind occellarium). Proboscis dark, red-brown, about twice as long as antennae, with longish white setae ventrally. Palp blackish with long white setae.

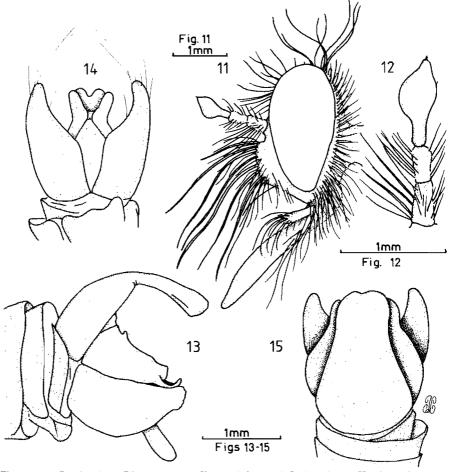
Thorax: Pleura dark, red-brown, entirely silver-gold pruinose, with white setae and bristles. Katatergite with a cluster (about 40) of long white bristles. Antepronotum with white setae and bristles (some of which are found on the lateral extremities). Anatergite with a good cluster of white setae laterally. Mesonotum dark, red-brown, entirely dull gold pruinose. Postpronotal lobes yellowish with ca. 5 weak whitish bristles and a group of white setae; ca. 7 notopleural bristles (usually 3 anteriorly, 4 posteriorly), ca. 4-5 supra-alars, ca. 3 postalars, all yellow-white. Dorsocentral bristles black, well developed and extending to anterior margin of mesonotum (some anterior ones may be yellowish). Posterior part of mesonotum with a well-developed median cluster of white setae. Scutellum with ca. 6 yellow-white long marginal bristles; disc with a few fine white setae only. Halters yellow-brown. Legs: brown-yellow except for all femora, which are dark red-brown with proximal and distal tips brown-yellow, and hind tibia are as femora but have a brown-yellow strip along dorsal parts. Coxae dark red-brown. Bristles and setae long, well developed, white. Claws black with brown-yellow bases. Wings: 7,2-11,2 mm long; 2,4-3,5 mm wide (Zimbabwe specimens smaller than those from northern Cape Province); holotype 8,4 × 2,6 mm. Membrane transparent, colourless in both sexes. Venetian orange and dark brown. Cells r<sub>5</sub> and m<sub>3</sub> closed and stalked, cup narrowly open or closed on wing margin.

Abdomen: Terga and sterna of  $\eth$  dark red-brown to black, entirely silver-gold pruinose.  $\Im$  terga with brown lateral and posterior margins, sterna orange-brown especially distal ones; only tg 1-4 pruinose.  $\eth$  genitalia shiny black, apruinose. All setae white; long in  $\eth$  shorter in  $\Im$ . Setae on segments 4-7 directed anteriorly.  $\eth$  genitalia as in Figs 13-15.

Variation: Minimal. 9 has more orange-brown on legs (especially femora), thorax (notably the postpronotal lobes) and abdomen.

MATERIAL EXAMINED. ZIMBABWE: 1 & (now defective) holotype, 1 & paratype, Sawmills, 12.ii (or xi). 1920, Rhodesian Museum (BMNH); 1 &, Sawmills, 23.ii (or xi). 1922, Rhodesian Museum (NM); 1 & 1 &, Sawmills, 14.xi.1924, R. H. R. Stevenson (NM). SOUTH AFRICA: Cape Province: 3 & 7 &, Kalahari Gemsbok Park, Nossob R. 35 km N camp, 2620BD, 21.iii.1982, J. Londt & L. Schoeman, Dry riverbed veget. (NM); 4 & 1 &, 15 km S Twee Rivieren, 2620DA, 21.iii.1982, J. Londt & L. Schoeman, Dry roadside veget. (NM); 1 & (paratype of D. Salicior), Twee Rivieren,

Figs 6-10. Daspletis hermanni (Ricardo). 6-7. Hopetown male. 6. Antenna, lateral aspect. 7. Head. 8-10. Lectotype male genitalia. 8. Lateral. 9. Ventral. 10. Dorsal.



Figs 11-15. Daspletis hirtus Ricardo. 11-12. Kalahari Gemsbok Park male. 11. Head. 12. Antenna, lateral aspect. 13-15. Sawmills topotype male genitalia. 13. Lateral. 14. Ventral. 14. Dorsal.

11–20.ii.1958, Kalahari Gemsbok Park Expedition (NM); 3 & 5 \, 9, 85 km W Vanzylsrus, 2721 AB, 22.iii.1982, J. Londt & L. Schoeman, Dry area Shrubs/Sand (NM); 1 &, 65 km SE Noenieput, 2720DC, 20.iii.1982, J. Londt & L. Schoeman, Kloof/Green Shrubs (NM); 1 \, 9, 20 km N of Noenieput, 2720AC, 20.iii.1982, J. Londt & L. Schoeman, Roadside vegetation (NM); 1 \, 9, 25 km N of Noenieput on road to Koopan-Suid, 20.iii.1982, J. Londt & L. Schoeman, Thick veget./trees (NM).

Remarks: Two  $\Im$  specimens were captured with prey (Lepidoptera- a butterfly, Colotis agoye bowkeri (Trimen)), and an unidentified moth.

## Daspletis placodes spec. nov. Figs 16-18

Derivation: Gr. plakos – anything flat and wide. Refers to the flat lateral flanges of the fused gonocoxites.

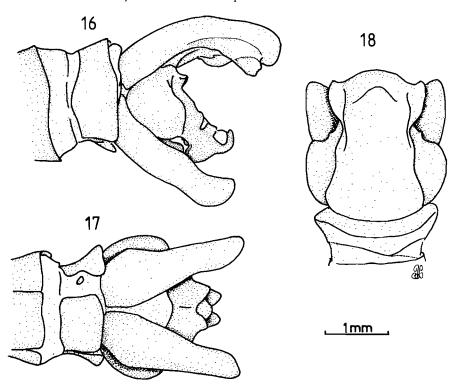
Description: Agrees closely with the description of *D. hirtus* except for the following points:

Head: & antenna dark brown except distal half of first flagellomere which is brown-orange.

Thorax: Hind 1 or 2 supra-alar bristles of  $\delta$  often dark brown or black (all yellowish in *hirtus*). Legs:  $\delta$  with legs dark red-brown except for distal tips of femora which are yellow.  $\varphi$  with dark red-brown tibiae and tarsi (tibiae with proximal parts more orange-brown), femora mostly orange-brown but with dorsal parts dark red-brown. Wings: 8,4–9,9 mm long: 2,7–3,2 mm wide. Cell *cup* closed on wing margin.

Abdomen: & genitalia as in Figs 16-18. Fused gonocoxites with laterally projecting shiny apilose flanges.

Variation: only minor sexual dimorphism as in hirtus.



Figs 16-18. Daspletis placodes spec. nov. paratype male genitalia. 16. Lateral. 17. Ventral. 18. Dorsal.

MATERIAL EXAMINED. SOUTH AFRICA: Transvaal: 6 & 6 \gamma\$ (holotype & and paratypes), Soutpan, Soutpansberge, 2229CD, 23-24.ii.1980, J. Londt & L. Schoeman, Bushveld vegetation (NM); I & (paratype), Soutpan, Soutpansberge, 10.iv.1979, L. Schoeman (NM); I & I \gamma\$ (paratypes), 6 km N of Vivo, 2229CC, 23-24.ii.1980, Londt & Schoeman, Bushveld veget. and old lands (NM); I \gamma\$ (paratype), SE2328Aa(nr. Tom Burke), 21.xii.1981, J. v. d. Berg (NM). NM Type No. 2654.

Remarks: A species related to both hirtus and stenoura but easily distinguished on male genital structure. Females are difficult to separate but placodes has dark redbrown tibiae and tarsi.

## Daspletis setithoracicus (Ricardo, 1925) comb. nov. Figs 19-21

Neodysmachus setithoracicus Ricardo, 1925: 264-265

Redescription: Based on the type series and other material examined.

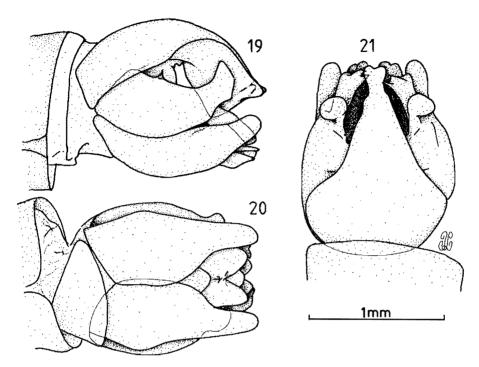
Head: Antenna orange-yellow, scape and pedicel with white bristles and setae, shape similar to hirtus. Face brown-yellow, profile similar to hirtus. Mystax composed of long white bristles and setae. Vertex similar to hirtus with lots of long white setae. Occilarium with numerous shiny white setae (no obvious bristles). Occiput similar to hirtus but dorso-medial bristles straight and shortish, not long and sinuous. Proboscis red-brown with white setae ventrally. Palp yellowish with white setae.

Thorax: Pleura brown, strongly gold-silver pruinose, moderately well covered in white setae. Katatergite with ca. 30 long, thin white setae. Antepronotum with yellow-white thin bristles and white setae. Anatergite as in hirtus. Mesonotum similar to hirtus and with similar setation. Dorsocentrals all yellow, moderately well developed; cluster of yellowish setae posteriorly between dorsocentrals similar to hirtus. 6–8 Scutellar bristles; disc with fine white-yellow setae only. Halters yellow. Legs: brown-yellow and only slightly darker on upper sides of femora; bristles and setae longish yellow. Claws black with orange bases; pulvillae poorly developed, less than half as long as claws. Wings: Lectotype  $\delta$  8,2 × 2,7 mm; others range 7,9 × 2,4 - 9,5 × 3,1 mm; membrane transparent, colourless; venation orange-brown. Cell  $r_5$  widely open,  $m_3$  closed and stalked, cup closed on wing margin.

Abdomen: Yellow terga with yellow lateral margins; sterna yellow; all segments with moderately long white setae, only tg 1 with bristles (yellow).  $\delta$  genitalia as in Figs 19–21; fused gonocoxites laterally flattened.  $\circ$  with setae of segments 5–7 anteriorly directed.

Variation:  $\mathcal Q$  specimens less setose and with bristles of mystax etc. yellower than  $\mathcal S$ .

MATERIAL EXAMINED. SOUTH AFRICA: Cape Province: 2 & 3 \( \frac{9}{2} \) (lectotype & and paralectotypes), Willowmore, 25.xii.1922 (2 &), xi.1922 (3 \( \frac{9}{2} \)), Dr Brauns (BMNH): 15 & 7 \( \frac{9}{2} \), Willowmore, various dates = 1.xii.1907, xii.1909, 20.xii.1909, 15.xii.1912, i.1914, xi.1916, 25.xii.1917, i.1918, xi.1918, 20.xii.1919, 25.xii.1919, 1.i.1920, 20.xii.1920, 18.i.1922, 18.v.1922, 3.i.1926, xi.1926, Dr Brauns (NM); 2 & 2 \( \frac{9}{2} \), Meiringspoort, 3322BC, 11-12.xii.1979, Londt & Stuckenberg, Rocky hillside & stream edge (NM); 1 \( \frac{9}{2} \), Diepkloof ca. 20 km E. de Rust, 3322BD, 12.xii.1979, J. Londt & B. Stuckenberg, Dry rocky hillside & stream (NN). Orange Free State: 1 &, Bloemfontein, 31.x.1920, H. E. Irving (NM).



Figs 19-21. Daspletis setithoracicus (Ricardo) lectotype male genitalia. 19. Lateral. 20. Ventral. 21. Dorsal.

Remarks: A species active for most of the summer (Table 1).

### Daspletis stenoura spec. nov. Figs 22-24.

Derivation: Gr. Stenos = narrow; oura = tail. Refers to the narrow gonocoxites.

Description: Agrees very closely with the description of D. hirtus except for the following points:

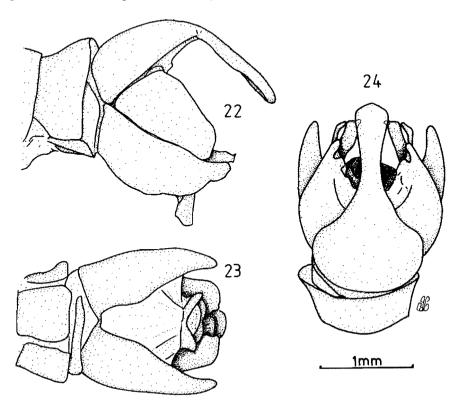
Head: All antennal segments orange. Mystacal bristles yellow-white.

Thorax: 4 supra-alar bristles. Legs: femora yellow-brown ventrally and distally on dorsal aspects. Wings: 8,3-9,3 mm long; 2,7-3,2 mm wide (in the northern Cape hirtus is generally a slightly larger species). Cell cup close to wing margin.

Abdomen: of genitalia as in Figs 22-24.

Variation: Only minor sexual dimorphism as in hirtus.

MATERIAL EXAMINED. SOUTH AFRICA: Cape Province: 10 & (holotype and paratypes) 3 & (paratypes), 30 km E. Groblershoop, 2822CD, 19.iii.1982, J. Londt & L. Schoeman, roadside vegetation (NM); 3& 4 & (paratypes), Padkloof Pass ca. 20 km S. Witsand, Dry river course Grass/Acacias, 2822DA, 17.iii.1982, J. Londt & L. Schoeman (NM); 4 & (paratypes), 15 km SE Vanzylsrus, 2622CC, 22.iii.1982, L. Londt &



Figs 22-24. Daspletis stenoura spec. nov. paratype male genitalia. 22. Lateral. 23. Ventral. 14. Dorsal.

L. Schoeman, Acacias Grass/Shrubs (NM); 2 & (paratypes), 55 km W. Vanzylsrus, 2721BA, 22.iii.1982, J. Londt & L. Schoeman, Acacias/Dry Grass (NM); 1 & (paratype), 50 km SW of Kuruman, 2723CA, 24.iii.1982, J. Londt & L. Schoeman, Acacia woodland area (NM). NM Type no. 2655.

Remarks: A species very similar to *D. hirtus* but male genitalia with narrow fused gonocoxites quite easily distinguished from those of *hirtus*. Females are difficult to separate but *stenoura* has bristles, especially those of the legs, somewhat yellower than in *hirtus*.

Daspletis vulpes Loew, 1858. Figs 25-27.

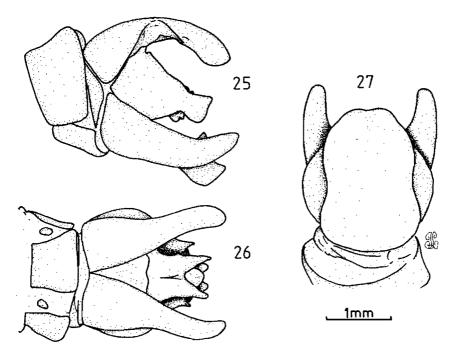
Daspletis vulpes Loew, 1858: 337 (1860: 163).

Redescription: Based on fresh material as listed below.

Head: Antenna: scape and pedicel dark brown with yellow and white bristles and setae; first flagellomere brown-yellow, similar in structure to hirtus. Face blackish,

entirely gold-silver pruinose, profile as in hirtus. Mystax confined to facial protuberance, composed of long brown-yellow bristles (longer than antennae) and whitish setae. Vertex blackish, entirely gold-silver pruinose, equipped with yellowish bristles and setae. Ocellarium similar to hirtus. Occiput blackish, gold-silver pruinose, equipped with yellow bristles and white setae; about 16 long, sinuous, brown-yellow bristles dorsocentrally. Proboscis dark red-brown, at least twice as long as antennae with few setae ventrally.

Thorax: Pleura dark red-brown, entirely silver-gold pruinose, with brown-yellow bristles and white setae. Katatergite with about 30 long brown-yellow bristles and a few whitish setae. Antepronotum with yellowish bristles and white setae. Anatergite with a weak cluster of yellowish setae laterally. Mesonotum dark red-brown, dull gold pruinose. Postnotal lobes orange with ca. 12 brown-yellow bristles and a few white setae; ca. 9 notopleural bristles (usually 5 anteriorly, 4 posteriorly), ca. 6 supra-alars, ca. 4 postalars, all brown-yellow. Dorsocentral bristles well developed (extending to anterior of mesonotum) mostly black but a few brown-yellow anteriorly. Mane of fine yellow-white setae between dorso-central series, extends along entire length of mesonotum. Scutellum with ca. 10 yellow long brown-yellow marginal bristles; disc with a few fine whitish setae only. Halters yellow-brown. Legs: Orange except for coxae and dorsal parts of femora which are dark-brown. Bristles brown-yellow, setae long yellow well developed. Claws black with red-brown bases.



Figs 25-27. Daspletis vulpes Loew, Hotazel male genitalia. 25. Lateral. 26. Ventral. 27. Dorsal.

Abdomen: Terga and sterna of  $\delta$  dark red-brown, entirely fine gold pruinose; terga with brown-yellow marginal bristles and long yellowish setae; sterna with an abundance of long yellow and shorter white setae. 9 with a few yellowish marginal bristles on tg 1-3, otherwise with shortish white setae only; setae of tg 4-7 have short white anteriorly directed setae.  $\delta$  genitalia as in Figs 25-27.

Variation:  $\delta$  is far more bristly than  $\mathfrak{P}$ , setae are longer and yellower.  $\mathfrak{P}$  has most setae shorter and white.  $\delta$  specimens from Botswana have bristles and setae ginger in colour.

MATERIAL EXAMINED. BOTSWANA: 2 &, 3 miles W of Ramboekas Pan. Part of K.G.N.P., 1.v.1970, B. Lamoral (NM); SOUTH AFRICA: Cape Province: 1 & Roaring Sands Resort nr. Witsand, Acacia Woodland/Sandy area, 2822CB, 17–18.iii.1982, J. Londt & L. Schoeman (NM); 2 &, 15 km SE Vanzylsrus 2622CC, 22.iii.1982, J. Londt & L. Schoeman, Acacias/Grass/Shrubs (NM); 1 &, 55 km W Vanzylsrus, 2721BA, 22.iii.1982, J. Londt & L. Schoeman, Acacias/Dry grass (NM); 6 & 8 &, ca. 5 km W of Hotazel, 2722BB, 23.iii.1982, J. Londt & L. Schoeman, Acacias/Grass/Shrubs (NM).

Previously recorded material: Loew's holotype was collected by Wahlberg at "N'Gami". According to Brink (1955) Wahlberg arrived at Ngami in April 1855 and was there until June when he moved further north. He returned for a few weeks in November of the same year. As vulpes appears to be active in late summer it is quite probable that his specimen was caught between April and June. Oldroyd (1974) records the species from Livingstone in Zambia.

Remarks: A female was collected near Vanzylsrus together with prey (Orthoptera: Acrididae).

#### Dioctobroma Hull, 1962

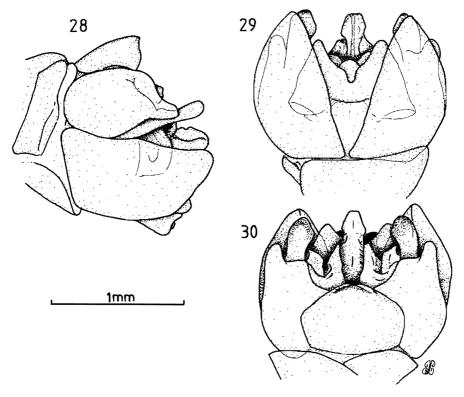
Dioctobroma Hull, 1962: 162. Type species: D. flavoterminatus Hull, 1962: 163 by original designation.

Dioctobroma is a well-defined genus. I have studied the holotype of the only described species of D. flavoterminatum (BOTSWANA: 1  $\mathcal{S}$ , Ghanzi, Mongalatsila, 24.iv.1925, J. Maurice (BMNH)), and another male with the same locality label. This other male has no type label and was probably not seen by Hull. This specimen may not belong to the same species as it differs in coloration, but its genitalia agree well with the holotype (Figs 28–30). Hull (1962) figured the wing which shows  $r_5$  to be closed and stalked. The only other material known to me, NAMIBIA: 2  $\mathcal{S}$  3  $\mathcal{S}$  Namuskluft 88, SE2716Dd, 7–15.x.1970 (SMW & NM), possess open  $r_5$  cells, they are otherwise very similar to the holotype.

## Dogonia Oldroyd, 1970

Dogonia Oldroyd, 1970: 269. Type species: D. saegeri Oldroyd, 1970: 269, by original designation

Oldroyd (1970) described this genus for two species from Zaïre (D. nigra & D. saegeri). I have not seen this material. Although he says that Dognonia has "metanotal callosities hairy" he compares it with Scylaticus, Cyrtopogon and Sarapogon, all of



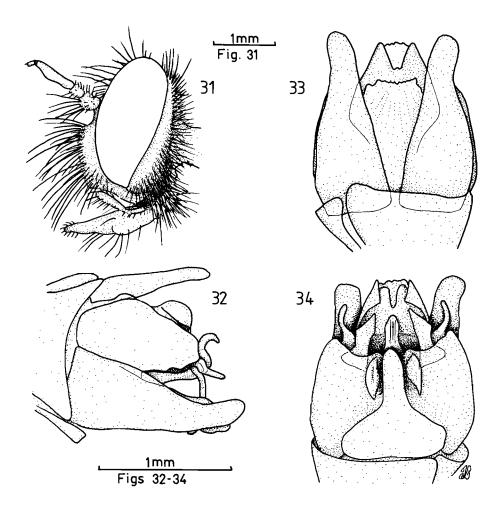
Figs 28-30. Dioctobroma flavoterminatum Hull, holotype male genitalia. 28. Lateral. 29. Ventral. 30. Dorsal.

which lack setae on the anatergite. He mentions that the genus keys to Neodysmachus in Hull's key but incorrectly calls Neodysmachus an Australian genus. Despite these confusing comments I believe Dogonia to be a valid genus and use the following features to separate it from Dioctobroma (the only other genus to lack well-developed occipital bristles). Oldroyd's Fig. 44 shows that Dogonia saegeri has a face slightly narrower than the width of one eye in anterior aspect (eye: face width ratio 1,39:1) whereas Dioctobroma has a wider face (eye: face width ratio 1,03:1). Dogonia has "antennae with two rather short, subequal segments", a feature not seen in Dioctobroma where the scape is clearly longer than the pedicel. Males of Dioctobroma flavoterminatum have very reduced fused gonocoxites, quite unlike the condition illustrated by Oldroyd for both species of Dogonia. The genital characteristics are likely to be of generic significance.

## Oratostylum Ricardo, 1925

Oratostylum Ricardo, 1925: 260. Type species: O. lepidum Ricardo 1925: 261, by original designation.

I have examined Ricardo's type material of O. lepidum in the BMNH and, as Hull (1962) gives such a good description of this monotypic genus, I merely present drawings of the male genitalia for comparative purposes (Figs 32-34). Oratostylum is very similar to Remotomyia but has a very prominent facial swelling (Fig. 31) unlike that found in Remotomyia (Fig. 36). Oratostylum lepidum has long palps which reach the level of the lower facial margin whereas Remotomyia species usually have shorter palps (in the case of R. longipalpus they are long).



Figs 31-34. Oratostylum lepidum Ricardo. 31. Lebombo male head. 32-34. Lectotype male genitalia. 32. Lateral. 33. Ventral. 34. Dorsal.

Material examined. ZIMBABWE; i & (lectotype), Matopos, 3.x.1920, Rhodesian Museum (BMNH); i & (paralectotype), Forestvale, 20.viii.1922, Rhodesian Museum (BMNH); i & (paralectotype), Bulawayo, 7.ix.1923, R. Stevenson (BMNH); i & (paralectotype), I sevenson (BMNH); i & (paralectotype), Bulawayo, 7.ix.1923, R. Stevenson (BMNH); i & (paralectotype), Stevenson (BMNH); i & (paralectotype), Bulawayo, 7.ix.1923, R. Stevenson (BMNH); i & (paralectotype), R. Stevenson (BMNH); i & (paralectotype),

## Remotomyia gen. nov.

Derivation: L. remotus = remote; G. myia = fly. Refers to the fact that flies of this group inhabit remote areas.

Type species: Daspletis albosetatus Hull, 1976 by present designation.

Diagnosis: Stenopogonine flies with the following combination of characters: Antenna with well-developed microsegment and enlarged scape (medially) and scutellum with strong bristles; propleuron and lateral lobes of pronotum with fine setae only – no strong bristles; palps usually less than half the length of the proboscis (except in longipalpus); facial swelling not markedly projecting in dorsal part (Fig. 36);  $\mathcal{Q}$  with setae of abdominal segments 6 and 7 anteriorly directed (those on segments 1–5 posteriorly directed).

#### Key to the species of Remotomyia

- 2. Palpal segment 2 exceptionally long, longer than segment 1 and projecting beyond level of lower facial margin; & genitalia as in Figs 43-45 ......longipalpus
- Palpal segment 2 short, shorter than segment 1 and not projecting beyond level of lower facial margin.
- Wing membrane colourless; dorsocentral bristles strongly developed from anterior to posterior margins of mesonotum; δ genitalia as in Figs 37-39......albosetatus

Remotomyia albosetatus (Hull, 1976), comb. nov. Figs 35-39

Daspletis albosetatus Hull, 1976: 240-241

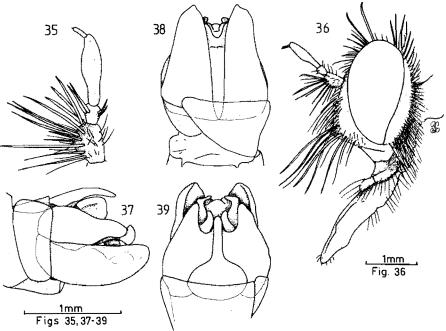
Redescription: Based primarily on  $\delta$  listed below.

Head: (Fig. 36): Antenna (Fig. 35) dark brown but first flagellomere orangebrown with yellow-brown basal part; microsegment well developed, almost as long as pedicel with terminal pit enclosing a small spine (seta); scape twice as long as pedicel, ventrally expanded and equipped with a good cluster of white bristles and setae; pedicel quite small with only a few small white setae. Face red-brown, entirely silver pruinose; lower facial margin projecting forward but not in the same way as in *Daspletis* species. Mystax composed of white bristles and setae; bristles about as long as antennae on lower facial margin but progressively decrease in length higher up face; setae extend to just below antennal bases. Vertex dark red-brown; silver-gold pruinose, equipped with yellowish bristles and white setae. Ocellarium not very prominent but with 6 strong yellow bristles. Occiput dark red-brown; silver-gold pruinose, equipped with shortish yellow-white bristles and white setae (bristles behind ocellarium not long and sinuous as in *Daspletis*). Proboscis dark red-brown with a few thin yellowish-white setae ventrally. Palp dark red-brown, shorter than half length of proboscis, equipped with few fine yellowish setae.

Thorax: Pleura blackish; gold pruinose except for a shiny patch involving most of anepisternum; bristles and setae white. Katatergite with about 7 shortish white bristles and a few white setae. Antepronotum with white setae and yellow-white bristles (none of which are found on lateral extremeties). Anatergite with a cluster of fine white setae. Mesonotum dark red-brown, postpronotal lobes orange, patches of silver and gold pruinescence. Postpronotal lobes with ca. 7 yellow-white bristles and tiny white setae; 4-5 notopleural bristles (1 or 2 anteriorly, 3 posteriorly), 2-3 supra-alars, 5-6 postalars, all brown-yellow. Dorsocentral bristles yellowish well developed, extending anterior of transverse suture to anterior margin of mesonotum. Scutellum with ca. 8 yellowish marginal bristles; disc with a few scattered short white setae. Halters brown-yellow. Legs: red-brown with short white bristles and setae. Claws orange with distal third blackish. Wings:  $\delta$  8,5 × 2,8 mm,  $\varphi$  8,1 × 2,6 mm. Membrane colourless and transparent in both sexes. Venation orange and dark brown. Cells  $r_5$ ,  $m_3$  and cup closed and stalked.

Abdomen: Segment dark red-brown, gold pruinose. Terga with white bristles and setae concentrated mainly on posterolateral parts.  $\delta$  genitalia as in Figs 37-39. Fused gonocoxites poorly developed, with a few long white setae at apex.

Variation: Minimal sexual dimorphism.



Figs 35-39. Remotomyia albosetatus (Hull). 35-36. Bagani female. 35. Antenna, lateral aspect. 36. Head. 37-39. Oshikango male genitalia. 37. Lateral. 38. Ventral. 39. Dorsal.

MATERIAL EXAMINED. NAMIBIA: 1 &, Oshikango, C. Koch (NM); 1 &, Kavango, Bagani (SE 1821Ba), 31.viii.1971, H3954 (SMW). Previously recorded material: Hull's & holotype was from NAMIBIA: Kaokoveld, Sanitatos, about 85 mi. WSW Ohopoho (1813BB), 14–16.vi.1951, Brink & Rudebeck. I have not seen this specimen.

Remarks: Collected in April and August (Table 1) this may be a winter active species.

## Remotomyia brunales spec. nov. Figs 40-42.

Derivation: L. brun = brown; ales = winged. Refers to the brown-stained wings of this species.

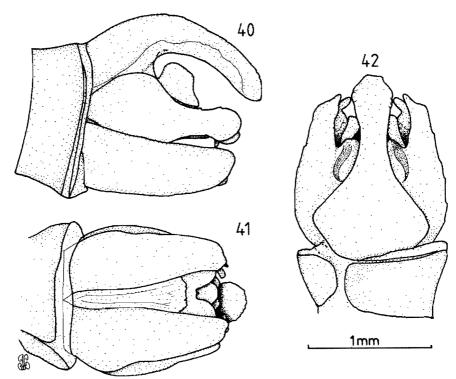
Description: Based primarily on holotype but supported with information from paratypes.

Head: Antenna dark red-brown except for proximal half of first flagellomere which is orange-brown; ventrally expanded scape with strong white bristles ventrally; scape and pedicel with fine white setae; microsegment shortish (about half length of pedicel). Face orange-brown with lower facial margin blackish; profile as for albosetatus (Fig. 36). Mystax composed of longish yellow-white bristles on and just above lower facial margin as well as short fine white setae which extend to just below antennal bases. Vertex dull black (greasy) with red-brown stripe between antennal bases and ocellarium; lateral margins with shortish dull brown bristles. Ocellarium weakly projecting, with 6 yellow-brown bristles; median ocellus twice the diameter of lateral ocelli. Occiput blackish (greasy) with dorsal bristles short yellow-brown with dark brown apices, setae fine yellow-white. Proboscis dark red-brown, stouter than that of albosetatus, with fine white setae ventrally. Palp dark red-brown with white setae.

Thorax: Pleura dark red-brown, gold pruinose (mostly greasy) fine setae white. Katatergite with ca. 10 moderately long thin yellow-brown bristles and a few fine white setae. Antepronotum with yellow-brown bristles anteriorly (do not extend to lateral extremeties or posterior parts). Anatergite with a group of fine white setae laterally. Mesonotum blackish with orange-brown post-pronotal and postalar lobes; gold pruinose (mostly greasy). Post-pronotal lobes with 5 yellow-brown bristles and short tiny white setae; ca. 4-5 notopleural bristles, 3 supra-alars, 4-5 postalars, all brown-yellow. Dorsocentral bristles poorly developed, confined mainly to posterior of suture although weakish bristles on anterior margin may be poorly developed dorsocentrally. Scutellum with ca. 10 marginal bristles; disc with tiny sparse white setae. Halters yellow-brown. Legs: red-brown, femora darker than rest; bristles short yellow-white (very short on femora), setae fine short white. Claws robust, orange-brown with black distal half; empodium laterally compressed, robust. Wings: holotype  $10,0 \times 3,5$  mm; membrane brown-stained, transparent; venation dark brown; cells  $r_5$  and  $m_3$  closed and stalked, cup closed on wing margin.

Abdomen: Dark red-brown (greasy); tg 1 with yellowish bristles laterally, all other segments with white setae only (quite well developed on posterolateral margins of terga).  $\delta$  genitalia as in Figs 40–42 fused gonocoxites well developed, longer than paired epandrial lobes.  $\mathfrak P$  with 7 bristles on each acanthophorite; setae of tg 6 and tg 7 anteriorly directed.

Variation: Negligible.



Figs 40-42. Remotomyia brunales spec. nov. paratype male genitalia. 40. Lateral. 41. Ventral. 42. Dorsal.

MATERIAL EXAMINED. NAMIBIA: 2 & 1 & (holotype & and paratypes), Vogelstrausskluft 87, Bethanien, SE 2717Ba, 24-29 ix.1974, H. 20536 (SMW, NM). NM type number 2656. H. 20536 is an accession number – the specimens were collected by five SMW staff members (Mokgoabone, Batista, Telje, Balt & Grobler).

## Remotomyia longipalpus spec. nov. Figs 43-45

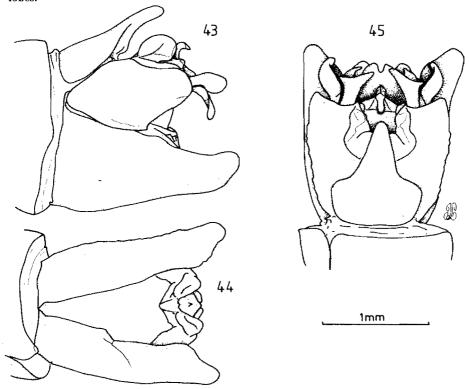
Derivation: L. longus = long; palpus = sensory organ associated with mouthparts.

Description: Based on the unique holotype specimen.

Head: Antenna brown-orange except for microsegment which is brown; enlarged scape equipped with many white bristles and setae; pedicel shortish with only a few white setae (mainly dorsally). Face orange, silver-gold pruinose; profile not as flat as in albosetatus but projecting slightly in dorsal part. Mystax of white bristles and setae. Vertex orange, silver-gold pruinose; lateral margins with pale yellow bristles. Ocellarium weakly projecting, with about 14 yellowish bristles. Occiput probably orange-brown but heavily silver-gold pruinose; postorbital bristles pale yellow. Proboscis dark red-brown with reddish and orange markings; fine yellow setae ventrally.

Thorax: Pleura brown-orange, gold pruinose, fine setae white. Katatergite with ca. 10 shortish pale yellow bristles and fine setae. Antepronotum with white bristles; lateral lobes of pronotum lack bristles. Anatergite with a good group of fine yellowish setae laterally. Mesonotum orange-brown with brown longitudinal strips; gold pruinose except on strips. Postpronotal lobes with about 8 yellow bristles and tiny white setae; ca. 6–8 notopleural bristles; 4 supra-alars; 7–8 postalars, all yellow white. Dorsocentral bristles poorly developed, confined to about 5 pairs posterior of transverse suture. Scutellum with 11 marginal bristles; disc with a few isolated yellowish setae. Halters pale yellow with slightly darker proximal parts. Legs: femora and tibiae dark red-brown ventrally orange dorsally, tarsi brown-orange; bristles and setae all white. Claws black with proximal halves brownish; empodium black, slender. Wings: 11,6  $\times$  4,5 mm, membrane transparent, slightly yellow-stained along veins; cell  $r_5$  closed and stalked; cell  $m_3$  narrowly open on wing margin; cup closed on wing margin.

Abdomen: Orange-brown with dark brown median and lateral markings; tg 1 with yellowish bristles laterally, all other terga with white setae only.  $\delta$  genitalia as in Figs 43-45; fused gonocoxites not particularly well developed, shorter than epandrial lobes.



Figs 43-45. Remotomyia longipalpus spec. nov. holotype male genitalia. 43. Lateral. 44. Ventral. 45. Dorsal.

MATERIAL EXAMINED. BOTSWANA: 1 & Holotype, Serowe, 6.ix.1982, Forchhammer, plantation (NM). NM Type No. 2657.

Remarks: An unusual Remotomyia in that the palpi are long and thin.

## Remotomyia penrithae spec. nov. Figs 46-48

Derivation: Named for Dr Mary-Lou Penrith whose entomological activities have added much to our knowledge of Namibian insects.

Description: Based on  $\delta$  holotype (pinned above a  $\mathfrak P$  paratype with which it was copulating at the time of capture) but supplemented with information taken from paratypes.

Head: Antenna similar to albosetatus but with fewer yellowish bristles on ventral aspect of scape. Face orange-brown, similar to albosetatus. Mystax with yellow and white bristles. Vertex, occilarium, occiput and proboscis similar to albosetatus. Palp very short (about one-third length of proboscis).

Thorax: Pleura orange-brown, gold pruinose, few setae except for dorsal part of an episternum which has a group of white setae. Katatergite with 5-7 yellow bristles and few small white setae. Antepronotum with a few yellow bristles anteriorly only. Anatergite with a row of small white setae laterally. Mesonotum dark brown with orange-brown postpronotal lobes; silver and red-gold pruinose stripes. 3 postpronotal bristles, 3 notopleurals, 2 supra-alars, 3 postalars, all brown-yellow. Dorsocentrals extending anteriorly only as far as transverse suture, brown-yellow. Scutellum with 4 yellowish marginal bristles; disc with a fair number of white setae mostly posteriorly. Halters brown-yellow. Legs: dark red-brown except for ventral aspects of femora and terminal tarsomeres which are orange-brown; bristles yellowish (shortish on femora), setae white. Claws orange with black tips. Wings: holotype  $5.5 \times 1.7$  mm (others larger, range  $6.1 - 7.2 \times 2.3 - 2.6$  mm); membrane transparent, colourless, ventation dark brown. Cell  $r_5$  widely open,  $m_3$  closed and stalked, cup closed on wing margin.

Abdomen: Dark red-brown, gold pruinose, covered with short white setae (yellow laterally on terga).  $\delta$  genitalia as in Figs 46-48, similar to *brunales* but fused gonocoxites narrower.  $\mathfrak P$  with setae of tg 6 and tg 7 anteriorly directed.

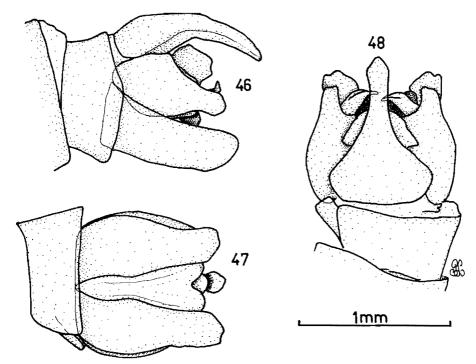
Variation: Negligible.

Material examined. NAMIBIA: 3 & 4 \( \frac{9}{2} \) (holotype & and paratypes), Blinkoog, Warmbad, SE2719Ca, 14–17.x.1971, H 4487 (SMW, NM); I \( \frac{9}{2} \) (paratype), Riverside 135, Bethanie, SE2616CA, 23–16 (?).x.1971, H4826 (SMW); I \( \frac{9}{2} \) (paratype), Kukorob 14, Keetmanshoop, SE2518Ca, 13.x.1971, H4445 (SMW); I \( \frac{9}{2} \) (paratype), Bagani, SE1321Ba, Kavango, H3955 (SMW); I \( ? \) (defective), Takuasa, SE1720Cd, Kavango, 14–19.viii.1971, H. 2998 (SMW). NM type number 2658. BOTSWANA: I \( \frac{7}{2} \) I defective (paratypes), Mboma Island, Moremi Reserve, 20° 17' E: 19° 11' S, 12.ix.1977, A. Russell-Smith, In sparse Acacia nigrescens woodland on game tracks, sandy soil (NM).

Remarks: Appears to be a spring active species (Table 1).

#### DISCUSSION

The stenopogonine genera which possess setae on the anatergite can be divided into two groups on the basis of antennal morphology. Daspletis and Microstylum do



Figs 46-48. Remotomyia penrithae spec. nov. paratype male genitalia. 46. Lateral. 47. Ventral. 48. Dorsal.

not possess a well-developed style whereas all the other genera (Anasillomos, Dioctobroma, Dogonia, Oratostylum and Remotomyia) do.

Daspletis and Microstylum possess much in common and can not be reliably separated using previously published keys. Although my work on Microstylum is not complete I believe the features used in my key are reliable.

Daspletis species fall into two groups: those with long sinuous bristles behind the ocellarium and those lacking such bristles. Those possessing these sinuous bristles are generally far more setaceous than those lacking them and possess genitalia which have much in common. The two species which do not belong to the group possessing these sinuous bristles were both transferred from other genera – setithoracicus (from Neodysmachus) and hermanni (from Microstylum). Both these species are found in the southern Cape while the other more typical Daspletis species are found predominantly in the northern Cape, Orange Free State and Transvaal. While these two species resemble some species of Microstylum they are, I believe, more appropriately placed in Daspletis.

The five genera with antennae possessing a well-developed style are all quite closely related. *Dioctobroma* and *Dogonia* are almost without bristles, or rather the bristles are so poorly developed they resemble setae. I am not really in a position to discuss the relationship between these genera as I have not seen specimens of *Dogonia*. *Dioctobroma* is, however, a fairly distinctive genus and can be separated from *Anasillomos*,

Oratostylum and Remotomyia with little difficulty. These last mentioned three genera are very similar and I have wondered whether they should not be considered as a single genus. The extraordinary development of bristles found in Anasillomos is quite unusual and, while this characteristic may be a specific apomorphy I believe that a new genus is justified until more material is available. Oratostylum and Remotomyia have a lot in common and the species R. longipalpus falls almost between the two genera. Oratostylum has a prominent facial swelling and can thus be distinguished from Remotomyia. This feature may, however, also be specific rather than generic, but, as so little material is available, the question and status is best left till a future time when a greater understanding of the species is possible. The remote arid parts of Namibia and Botswana have been poorly surveyed and I believe that many interesting Asilidae, including species in the genera discussed here, are still to be discovered there.

#### ACKNOWLEDGEMENTS

I wish to thank Mr J. Chainey and other members of the Diptera Section, British Museum (Natural History) for assistance given to me during my visit and since; Dr B. R. Stuckenberg, Director of the Natal Museum, for his continued support; Mrs A. Seymour for technical assistance and the Council for Scientific and Industrial Research for financial assistance.

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Accepted 16 June 1983